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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/807,933	04/20/2001	Yuko Nakamura	VX012273 PCT	7458

21369 7590 05/05/2003

VARNDELL & VARNDELL, PLLC
106-A S. COLUMBUS ST.
ALEXANDRIA, VA 22314

EXAMINER

RAO, MANJUNATH N

ART UNIT PAPER NUMBER

1652

DATE MAILED: 05/05/2003

13

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Applicant(s)

09/807,933

Applicant(s)

NAKAMURA ET AL.

Examiner

Manjunath N. Rao, Ph.D.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 April 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-56 and 58-85 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-56, 58-85 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on: _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other:

DETAILED ACTION

Claims 1-56, 58-85 are now pending in this application.

Election/Restrictions

Restriction is required under 35 U.S.C. 121 and 372.

This application contains the following inventions or groups of inventions which are not so linked as to form a single general inventive concept under PCT Rule 13.1.

In accordance with 37 CFR 1.499, applicant is required, in reply to this action, to elect a single invention to which the claims must be restricted.

Group I, claims 1-9, 41, 60-71, 72, 73, 81-82, drawn to polypeptide, polynucleotide, vectors, host cells and method of making the polypeptide, and composition comprising the polypeptide.

Group II, claim 10, 19-22 drawn to an enzyme comprising SEQ ID NO:18 as CBD.

Group III, claim 11, 12, drawn to an enzyme comprising SEQ ID NO:19 as CBD.

Group IV, claim 13, drawn to an enzyme comprising SEQ ID NO:20 as CBD.

Group V, claim 14, drawn to an enzyme comprising SEQ ID NO:21 as CBD.

Group VI, claim 15, drawn to an enzyme comprising SEQ ID NO:22, 23, and 24 as CBD.

Group VII, claim 16, drawn to an enzyme comprising SEQ ID NO:25 as CBD.

Group VIII, claim 17, drawn to an enzyme comprising SEQ ID NO:26 or 27 as CBD.

Group IX, claim 18, drawn to an enzyme comprising SEQ ID NO:28 as CBD.

Group X, claim 23, 26, 28, 29 32, 34-36 drawn to an enzyme consists of SEQ ID NO:31 as linker region.

Group XI, claim 24-25, 30, 31, drawn to an enzyme consists of SEQ ID NO:32 as linker region.

Group XII, claim 33, drawn to an enzyme consists of SEQ ID NO:33, 34, 35, 36, and 37 as linker region.

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Group XIII, claim 37, 38-40, drawn to an endoglucanase enzyme comprising amino acid sequence as shown in SEQ ID NO:1, 3, 5, 7, 9 or 11.

Group XIV, claims 42-56, 58-59, drawn to modified enzyme.

Group XV, claims 74-80, drawn to different methods of treating cellulose fabrics.

Group XVI, claim 83, drawn to a method of improving freeness of a pepper pulp.

Group XVII, claim 84, drawn to a method of de-inking a waste paper.

Group XVIII, claim 85, drawn to a method of improving the digestibility of an animal feed.

The inventions listed as Groups I-V do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons:

Groups I-XIV are products and a process of making; these share the special technical feature of the polynucleotide and polypeptide molecules, which groups II-V do not share.

Group XV is a method ; this shares the special technical feature of treating cellulose fabrics, which groups I-XIV and XVI-XVIII do not share.

Group XVI is a method ; this shares the special technical feature of treating paper pulp in paper industry, which groups I-XV and XVII-XVIII do not share.

Group XVII is a method ; this shares the special technical feature of treating waste paper, which groups I-XVI and XVIII do not share.

Group XVIII is a method ; this shares the special technical feature of treating animal feeds, which groups I -XVII do not share.

Therefore, the claims are not so linked by a special technical feature within the meaning of PCT Rule 13.2 so as to form a single inventive concept.

The inventions listed as Groups I-XVIII do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, they lack the same or corresponding special technical features for the following reasons: Pursuant to 37 C.F.R.

1.475(d), the ISA/US considers that where multiple products and processes are claimed, the main

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invention shall consist of the first invention of the category first mentioned in the claims and the first recited invention of each of the other categories related thereto. Accordingly, the main invention (Group I) comprises the first recited product, a endoglucanase, DNA encoding the endoglucanase and its method of making. Further, pursuant to 37 C.F. R. 1.475(d), the ISA/US considers that any feature which the subsequently recited products and methods share with the main invention does not constitute a special technical feature within the meaning of PCT Rule 13.2 and that each of such products and methods accordingly defines a separate invention.

Species Election

This application contains claims directed to more than one species of the generic invention. These species are deemed to lack unity of invention because they are not so linked as to form a single general inventive concept under PCT Rule 13.1.

The species are as follows:

- 1) Claim 13, Endoglucanase enzyme wherein the CBD consists of SEQ ID NO:20 wherein X1 through X17 comprises different amino acids. Applicant is required to elect a single position (i.e., any one position from X1 to X17) and a single amino acid corresponding to the position elected.
- 2) Claim 14, Endoglucanase enzyme wherein the CBD consists of SEQ ID NO:21 wherein X21 through X32 comprises different amino acids. Applicant is required to elect a single position (i.e., any one position from X21 to X32) and a single amino acid corresponding to the position elected.

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3) Claim 16, Endoglucanase enzyme wherein the CBD consists of SEQ ID NO:25 wherein X1 through X17 comprises different amino acids. Applicant is required to elect a single position (i.e., any position from X1 to X17) and a single amino acid corresponding to the position elected.

Applicant is required, in reply to this action, to elect a single species (**i.e., a single position and a single amino acid**) along with the respective group to which the claims shall be restricted if no generic claim is finally held to be allowable. The reply must also identify the claims readable on the elected species, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered non-responsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

The claims are deemed to correspond to the species listed above in the following manner:

Variants of endoglucanase

The species listed above do not relate to a single general inventive concept under PCT Rule 13.1 because, under PCT Rule 13.2, the species lack the same or corresponding special technical features for the following reasons: Each species has a distinct amino acid structure which requires an independent search.

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Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Manjunath N. Rao, Ph.D. whose telephone number is 703-306-5681. The examiner can normally be reached on 7.30 a.m. to 4.00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ponnathapura Achutamurthy can be reached on 703-308-3804. The fax phone numbers for the organization where this application or proceeding is assigned are 703-308-4242 for regular communications and 703-308-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-306-0196.

Manjunath N. Rao
May 2, 2003


MANJUNATH RAO
PATENT EXAMINER